

**REMARKS****OVERVIEW**

This amendment accompanies a Request for Continued Examination (RCE). Claims 1-9 and 11-15 are pending in this application. Claim 1 has been amended and now includes the limitations of now cancelled claim 10, as well as an "insulating" substrate. Claims 2-4 and 12 have been amended to be consistent with amended claim 1. Claims 14 and 15 are new, support being apparent at least from the original claims. The present response is an earnest effort to place all claims in proper form for immediate allowance.

**ISSUES UNDER 35 U.S.C. § 112**

Claims 1-13 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. In particular, the Examiner indicates that the term "about" in claim 1 is a relative term which renders the claim indefinite. Therefore, the term "about" has been removed from claim 1. Therefore, it is respectfully submitted that this rejection should be withdrawn.

The Examiner also indicates that it is not clear how the selections that create a reduction of resistance change due to power create a product that is distinct from the prior art or define over the prior art, since a "reduction" lacks a comparative standard. The comparative standard is the independent manipulation of these parameters to reduce resistance change due to power, as opposed to consideration of a cumulative effect. Additional differences between the prior art and the present invention will become apparent from the following discussion.

**ISSUES UNDER 35 U.S.C. § 102**

Claims 1-9 and 11-13 have been rejected under 35 U.S.C. § 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over U. S. Patent No. 4,677,413 to Zandman et al. Claim 10 has been incorporated into claim 1, therefore this rejection must be withdrawn, as Zandman does not disclose foil on both sides of the substrate. To further clarify, claim 1 has been amended to require an "insulating" substrate. The term "insulating" is not explicitly used in the application as originally filed, however, would be apparent as alumina is disclosed and the substrate is between two resistive foils.

Also, in making this rejection, the Examiner neglects the fact that the Examiner uses the "insulating substrate" 8 (which can be alumina) of Zandman in order to attempt to meet the limitations of claim 1. The insulating substrate 8 of Zandman is used when a metallic substrate is used in order to reduce capacitance (col. 5, lines 32-36). Zandman uses a metal substrate of zero thermal expansion. The claimed properties of the substrate of claim 1 are consistent with a standard foil ceramic substrate resulting in a low TCR, which is not taught or suggested by Zandman. Using a low TCR and bonding the foil on two sides of the substrate reduces temperature gradients. Zandman does not bond foil to opposite sides of the same substrate.

The limitation of "the first resistive foil, pattern, and insulating substrate being selected to provide a cumulative effect of reduction of resistance change due to power" of claim 1 would not be met by the Zandman device because the Zandman device uses the insulating substrate where there is also a metal substrate. Thus, when the Examiner considers the "substrate" of claim 1 to be the insulating substrate of Zandman, due to the presence of metallic substrate, the selection of the insulating substrate would not provide a cumulative effect to reduction of resistance change

due to power. Therefore, this rejection to claim 1 must be withdrawn. As claims 2-9 and 11-13 depend from claim 1, these rejections should also be withdrawn.

Claim 10 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Zandman et al. in view of Witt et al (US 6,404,324). The Examiner recognized that Zandman does not disclose foil on both sides of the substrate (Office Action, p. 4, numbered paragraph 4). The Examiner indicates that Witt discloses resistors on both sides of the substrate in order to minimize bending in order to handle more power. Witt does not, however, disclose foils on both sides of a substrate.

It is further observed that the Examiner consider the "substrate" of Zandman to be the insulating substrate 8. The resistive foils of claim 1 are both bonded to the same substrate, not to different layers. Therefore, this rejection is misplaced, and these rejections should be withdrawn.

Witt, preferably uses a substrate of metal or other material having a high thermal conductivity (col. 2, lines 42-44). Witt's resistive coatings are printed and are not foils (col. 5, lines 1-2). Thus neither Witt nor Zandman disclose resistive foil on both sides of a substrate. Moreover, neither Witt nor Zandman cements the second resistive foil to an opposite side of a substrate as the first resistive foil. Thus, there are significant differences between the claimed invention and Zandman and Witt. These differences include not only the different purposes and different processes but also the resulting differences in structure. Therefore, it is respectfully requested that the Examiner find all claims in proper form for immediate allowance.

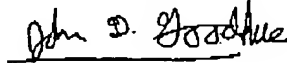
## CONCLUSION

This amendment accompanies the filing of a Request for Continued Examination (RCE). Please charge Deposit Account No. 26-0084 the amount of \$790.00 for the RCE per the attached

transmittal. No other fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,



JOHN D. GOODHUE, Reg. No. 47,603  
McKEE, VOORHEES & SEASE, P.L.C.  
801 Grand Avenue, Suite 3200  
Des Moines, Iowa 50309-2721  
Phone No: (515) 288-3667  
Fax No: (515) 288-1338  
**CUSTOMER NO: 22885**

Attorneys of Record

- bja -